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D206-667-247TRN
Job Sheet 202724



Part No: D206-667-247TRN Job Qty: 1 pcs

Part Name: Crosstube Assembly, Mid Aft



Part Weight: 0 lbs Status: New Priority: Medium

Job Created: 11/1/19 Job Tracking No:

Due Date: 11/22/19 Created By: Marie Lajeunesse

Type: Stock Description:

Note: DWG D206-667-247 REV.B IPP rev:A 11.01.06 new issue DD verf:EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Lead Time	Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier			
100	Mori Seiki TL-40 - 1	1 pcs	11/22/19	11/22/19	1.00	1.33	Mori Seiki TL-40 - 1			DAS 662019/11/15
110	QC 2	1 pcs	11/22/19	11/22/19	0.00	0.00	QC 2 - 1		9-89	
							QC 2 - 12			
							QC 2 - 14			
							QC 2 - 17			
							QC 2 - 19			
							QC 2 - 2			
							QC 2 - 20			
							QC 2 - 22			
							QC 2 - 23			
							QC 2 - 25			
							QC 2 - 32			
							QC 2 - 33			
							QC 2 - 35			
							QC 2 - 39			
							QC 2 - 4			
							QC 2 - 40			
							QC 2 - 44			
							QC 2 - 45			
							QC 2 - 48			
							QC 2 - 49			
							QC 2 - 50			
							QC 2 - 51			
							QC 2 - 52			
							QC 2 - 57			
							QC 2 - 62			
							QC 2 - 63			
							QC 2 - 8			DAS 662019/11/15
							QC 2 - 66			
							QC 2 - 64		9-89	
							QC 2 - 65			

				QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
120	Mori Seiki TL-40 - 1 - B4B	1 pcs	11/22/19	1.00 1.33	Mori Seiki TL-40 - 1 - B4B
130	QC 2	1 pcs	11/22/19	0.00 0.00	QC 2 - 1
					QC 2 - 12
					QC 2 - 14
					QC 2 - 17
					QC 2 - 19
					QC 2 - 2
					QC 2 - 20
					QC 2 - 22
					QC 2 - 23
					QC 2 - 25
					QC 2 - 32
					QC 2 - 33
					QC 2 - 35
					QC 2 - 39
					QC 2 - 4
					QC 2 - 40
					QC 2 - 44
					QC 2 - 45
					QC 2 - 48
					QC 2 - 49
					QC 2 - 50
					QC 2 - 51
					QC 2 - 52
					QC 2 - 57
					QC 2 - 62
					QC 2 - 63
					QC 2 - 8
					QC 2 - 66
					QC 2 - 64
					QC 2 - 65
					QC 2 - 5
					QC 2 - 71
					QC 2 - 73
					QC 2 - 69
140	QC 8	1 pcs	11/22/19	0.00 0.00	QC 8 - 12
					QC 8 - 14
					QC 8 - 17
					QC 8 - 20
					QC 8 - 25
					QC 8 - 3
					QC 8 - 32
					QC 8 - 33
					QC 8 - 35
					QC 8 - 39
					QC 8 - 4
					QC 8 - 44
					QC 8 - 45
					QC 8 - 49
					QC 8 - 58
					QC 8 - 8
					QC 8 - 9
					QC 8 - 68
					QC 8 - 67
					QC 8 - 1 (A)

DAS
66 2019/11/18
9-89

DAS
66 2019/11/19
9-89

					QC 8 - 47	
					QC 8 - 40	
					QC 8 - 52	
					QC 8 - 23	
					QC 8 - 57	DAS
					QC 8 - 76	76
					QC 8 - 61	9-89
145 Crosstubes - 2 - B4B	1 pcs	11/22/19	0.00 0.50		Crosstubes - 1 - B4B	
					Crosstubes - 2 - B4B	33 11/22/2019
					Crosstubes - 3 - B4B	
					Crosstubes - 4 - B4B	
150 Crosstubes - 3 - B4B	1 pcs	11/22/19	0.00 0.32		Crosstubes - 1 - B4B	
					Crosstubes - 2 - B4B	
					Crosstubes - 3 - B4B	8 NOV 27 2019
					Crosstubes - 4 - B4B	
160 QC 7	1 pcs	11/22/19	0.00 0.00		QC 7 - 10	
					QC 7 - 13	
					QC 7 - 14	
					QC 7 - 15	
					QC 7 - 17	
					QC 7 - 18	
					QC 7 - 19	
					QC 7 - 2	
					QC 7 - 28	
					QC 7 - 3	
					QC 7 - 30	
					QC 7 - 34	
					QC 7 - 36	
					QC 7 - 37	
					QC 7 - 41	
					QC 7 - 47	
					QC 7 - 48	
					QC 7 - 51	
					QC 7 - 58	
					QC 7 - 59	
					QC 7 - 60	
					QC 7 - 9	
					QC 7 - 68	
					QC 7 - 50	
					QC 7 - 67	
					QC 7 - 40	
					QC 7 - 24	
					QC 7 - 43	
					QC 7 - 61	DAS
					QC 7 - 81	76
					QC 7 - 76	9-89
					QC 7 - 79	
170 Packaging 3-1 - Stock - B4B	1 pcs	11/22/19	0.00 0.00		Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	

					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	BB 11/27/2019
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	
					Packaging 3 - 28 - B4B	
					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	
					Packaging 3 - 36 - B4B	
180	QC 21 - SA	1 pcs	11/22/19	0.00	0.00	QC 21 - SA - 21
						QC 21 - SA - 70
						QC 21 - SA - 53
Part Op 100 - Mori Seiki CNC Lathe Large - 1-Fill tube with sand & install plugs 206-207 on both ends as per Folio FB030 2-Turn Descriptions: first side as per Folio FB030 3-Blend transition line with belt sander 60 grit. 110 - QC2- Inspect parts off machine FAI/FAIB 120 - Mori Seiki CNC Lathe Large - 1-Turn second side as per Folio FB030 2-File down transition lines smooth. 130 - QC2- Inspect parts off machine FAI/FAIB 140 - QC8- Inspect parts - second check 145 - Crosstubes - GRIND ONLY TRANSITION LINES SMOOTH LONGITUDE WAY. 150 - Crosstubes - 1- handfinish X-TUBE INSIDE AND OUT 160 - QC7-Inspect Chemical Conversion Coat 170 - Identify as per dwg & Stock Location: _____ - LOCATION : LG014 180 - QC21- Final Inspection - Work Order Release						
Job BOM						
Part / Item	Component Name	Quantity	Operation			Container
D6004-115	Crosstube Material	1 pcs (1 ea)	100-Mori Seiki TL-40 - 1			F107869
Job Allocations						
Operation	Component Part	Required	Inventory	Allocated		
100-Mori Seiki TL-40 - 1	D6004-115	1	31	0		
Part Specifications						
Specifications could not be found.						



Container No: S232308



Part: D206 - 667 - 247TRN
Job No: 202724
Serial No/Batch: S232308
Revision: B
Inspector:
Exp Date:
Instructions:

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Plex 11/1/19 10:11 AM Dart.lajeunesse.marie

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DART AEROSPACE LTD	Work Order:	202724
Description: Crosstube Assembly, Mid Aft	Part Number:	D206-667-247
Inspection Dwg: D206-667-247 Rev: A		Page 1 of 2

FIRST ARTICLE INSPECTION CHECKLIST

Inspection Sheet	Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	2.490	+0.005/-0.000	2.490	✓		CNC-04	
	2.025	+0.005/-0.000	2.028	✓			
	2.079	+0.005/-0.000	2.084	✓			
	2.145	+0.005/-0.000	2.150	✓			
	2.209	+0.005/-0.000	2.214	✓			
	2.287	+0.005/-0.000	2.292	✓			
	2.363	+0.005/-0.000	2.368	✓			
	0.200	+/-0.010	0.205	✓		CNC-08	
	R0.063	+/-0.010	0.063	✓		AG	
	R2.00	+/-0.010	2.000	✓			
	R0.063	+/-0.010	0.063	✓			
	4.438	+/-0.010	4.440	✓		CNC-08	
SIDE B	2.490	+0.005/-0.000	2.490	✓		CNC-04	
	2.025	+0.005/-0.000	2.030	✓			
	2.079	+0.005/-0.000	2.084	✓			
	2.145	+0.005/-0.000	2.150	✓			
	2.209	+0.005/-0.000	2.214	✓			
	2.287	+0.005/-0.000	2.292	✓			
	2.363	+0.005/-0.000	2.368	✓			
	0.200	+/-0.010	0.203	✓		CNC-08	
	R0.063	+/-0.010	0.063	✓		AG	
	R2.00	+/-0.010	2.000	✓			
	R0.063	+/-0.010	0.063	✓			
	4.438	+/-0.010	4.436	✓		CNC-08	
	99.76	+/-0.020	99.78	✓		Type	

Item	Qty	Part Number	Description
	-247		
1	X	D208-887-247	CROSSTUBE ASSEMBLY (208L MID AFT)
2	1	D8004-116	CROSSTUBE
3	2	D2873-043	NUT PLATE
4	2	D2873-046	NUT PLATE
5	2	D2882-1	SUPPORT
6	4	D3696-083-450	RUBBER CUSHION
7	4	MS21920-22	CLAMP
8	14	MS20601AD4W10	RIVET (OR NAS6302B-4-10)
9	A/R	PROSEAL 880 B-2	SEALANT, AMS-S-8802 CLASS B-2

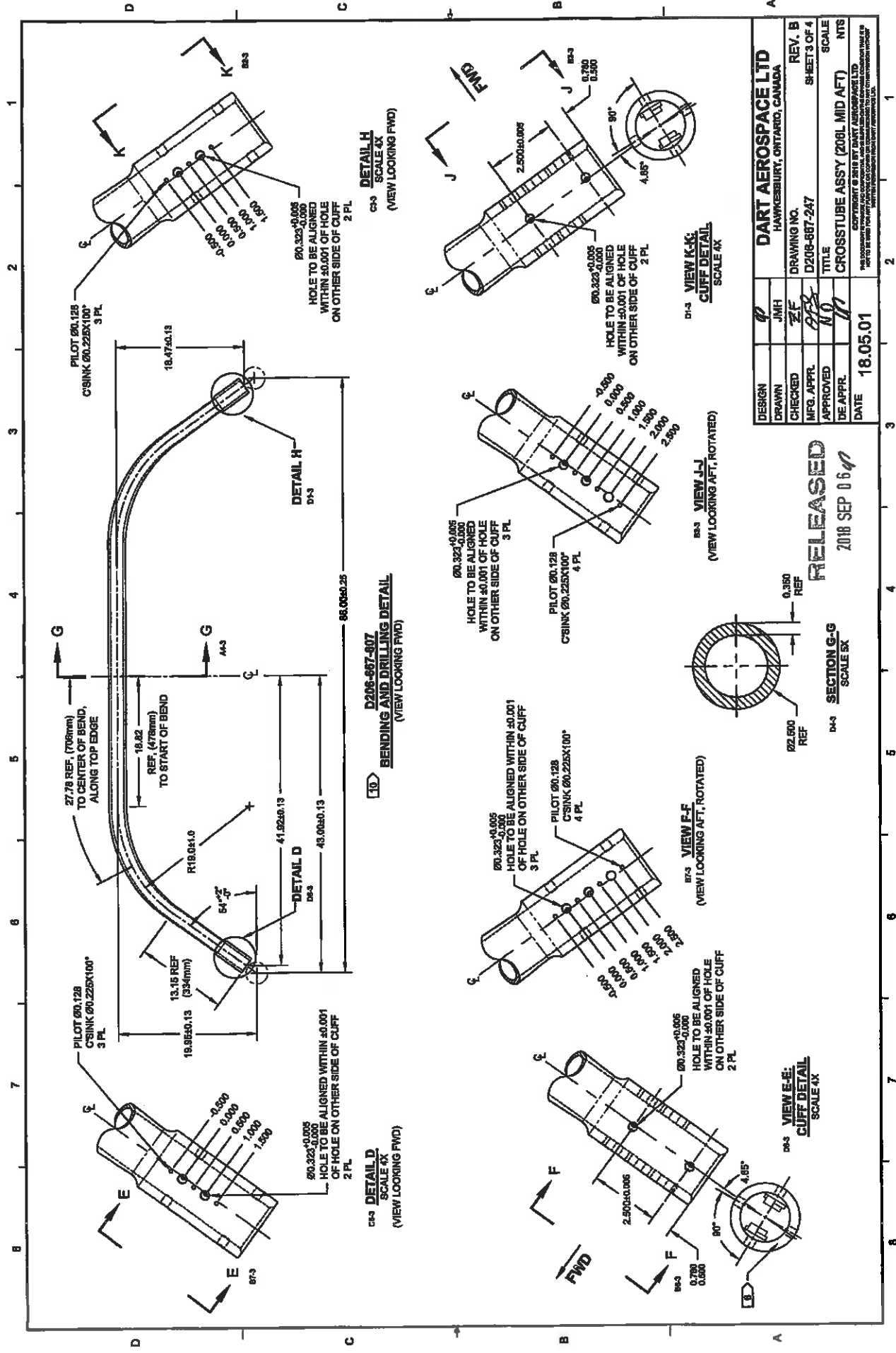
GENERAL NOTES:

- 1) MATERIAL: MANUFACTURED FROM D8004-116
- 2) FINISH: FINISHED LENGTH = 93.7830.020
CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: SCRIBE DART PART NUMBER "D208-887-247" AND BATCH NUMBER ON INSIDE OF CLIFF PER DART QSI 044 8.4 (VIBRATING STYLUS).
- 7) WEIGHT: 21.1 lbs (-907 = 17.7 lbs)
- 8) PART IS SYMMETRIC ABOUT CENTERLINE.
- 9) RUN CUTTER OFF PART WHERE INDICATED. BLEND OUT EDGE LONGITUDINALLY. TRANSITION SHOULD BE SMOOTH.
- 10) BEND PROGRESSIVELY WITH A MINIMUM OF 8 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- 11) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038
- 12) TO INSTALL D2882-1 SUPPORT: ABRASE MATING SURFACE OF SUPPORT AND CROSSTUBE WITH 180-GRIT SANDPAPER AND REMOVE RESIDUE WITH MEK (OR EQUIVALENT). APPLY A 0.04" TO 0.07" THICK LAYER OF PROSEAL 880 CLASS B-2 (OR AMS-S-8802 CLASS B-2) SEALANT TO MATING SURFACE OF SUPPORT.
- 13) INSTALL MS21920-22 CLAMPS WITH D3696-083-450 RUBBER CUSHIONS TO SECURE THE D2882-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMP MECHANISMS ARE LOCATED ON CROSSTUBE SUPPORTS.
- 14) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS ARE SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING. PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMP8 AFTER PROSEAL 880 SEALANT HAS CURED FOR 72 HOURS.

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WORK ORDER
NO. 22274 MJS
19-71-01

B	REVISE SHEET 2 ASSEMBLY DETAIL - HOLE PATTERN PER CAR16-221. UPDATE PARTS LIST AND GENERAL NOTES 12 & 15 TO INCORPORATE DED A-1.	JMH	18.06.01
A	NEW ISSUE	CP	10.12.23
REV.	DESCRIPTION	BY	DATE
DESIGN	JMH		
DRAWN	JMH		
CHECKED	ZF		
MFG. APPL.	DF		
APPROVED	NO		
DIE APPL.	q		
DATE	18.05.01		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		REV. B	
DRAWING NO. D208-887-247		SHEET 1 OF 4	
TITLE CROSSTUBE ASSY (208L MID AFT)		SCALE	
DATE 18.05.01		COPYRIGHT © 2018 BY DART AEROSPACE LTD THIS DOCUMENT IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD	NTS

RELEASED
2018 SEP 06
JCN18-777



Entered: _____ Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE



Route update only

NCR No. _____

Job: _____ Part No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐		DEPARTMENT/PROCESS Skid-tube ☐ Cross tube ☐ Eng. (Non-AW) ☐ Machining ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Large Fab ☐ Finishing ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QS1042)			
Description Work Order Deviation		Disposition					
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY Pressure/Forced ☐ Contamination ☐ Power Loss/Surge ☐ Bending ☐ Misaligned/off center ☐ Folio/Program ☐ Crushing ☐ BOM/Route ☐ Grain Direction ☐ Cracks ☐ Broken/Damage/Defect ☐ Weld ☐ Crimp/kink/Ripple/Wave/Twist ☐ Incomplete/Unclear Instructions ☐ Wrong Stock Pulled ☐ Marks/Chatter ☐ Drill Holes ☐ Out of Sequence ☐ Mislabeled ☐ Fit/Function ☐ Off-set/Set-up ☐ Other/Details:				Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread ☐	
		Completed By				Lead hand / Supervisor	
		QC / QA Coordinator					